Background/Update: North Carolina Immunization Registry (NCIR) February 23, 2000

Immunization Coverage in North Carolina

The percentage of children 19-35 months of age who were up-to-date with 4 doses of diphtheria, tetanus, pertussis, 3 doses of poliomyelitis, and 1 dose of measles, mumps, and rubella vaccine was 84%.

Purposes of the NCIR:

In acknowledgment of the need to balance sharing immunization information among authorized entities with the need to protect the privacy and confidentiality of children, parents, providers and other relevant stakeholders, the Immunization Branch is committed to a clearly defined set of purposes for the NCIR. They are:

- To give patients, parents, health care providers, schools and child care facilities timely access to complete, accurate and relevant immunization data;
- To assist in the evaluation of a child's immunization status and identify children who need (or are past due for) immunizations;
- To assist communities in assessing their immunization coverage and identifying areas of underimmunization;
- To fulfill federal and state immunization reporting needs.

Importance to North Carolina and as an integral component of the Universal Childhood Vaccine Distribution Program (UCVDP):

Immunizing North Carolina's children has become substantially more complicated, and this trend is likely to continue. Changing schedules, new vaccines, state-provided vaccines, vaccine inventory, VFC eligibility and simply having complete and accurate records of a child's immunization history are all significant clinical and administrative challenges to providing childhood vaccines. Nationally, immunization registries are emerging as critical tools for providers, public heath and families working together to ensure high coverage rates. One of the North Carolina Immunization Branch's chief priorities for 2000 is to identify and purchase an existing immunization registry from another state for implementation in both public and private sectors in North Carolina. The new North Carolina Immunization Registry (NCIR) will become an integral part of the current state vaccine program, the Universal Childhood Vaccine Distribution Program (UCVDP). Providers will account for vaccine and manage inventories through this computerized system. The NCIR will assist healthcare providers and parents in assuring that all children are age-appropriately immunized, and allow public health providers to concentrate efforts on areas with a specific need for immunization improvement. Dr. H. David Bruton, Secretary of the Department of Health and Human Services and a pediatrician, is very committed to the success of the NCIR project, and has made his commitment formal by agreeing to serve as project champion.

Current Project Status:

A statewide immunization registry has been implemented in all 100 public health departments. The registry is the only statewide component of the county-based public health management system that

is used primarily for Medicaid billing and state reporting. However, the current NCIR is not adaptable for accommodating all UCVDP providers, and at this time no private providers are using the system. The Immunization Branch has spent the past 18 months defining North Carolina's registry requirements (with input from key stakeholders) and identifying a proven registry system in operation in another state that will offer full functionality to all immunization providers. Michigan, a state similar in size with regards to birth cohort and immunization providers, has successfully developed and implemented a registry with the support of their stakeholders that has been recognized by the Centers for Disease Control and Prevention (CDC) as a model registry project. The opportunity exists to partner with the state of Michigan and both benefit from their experience and share in future efforts to enhance and maintain the system. The next parallel steps include: identifying and securing funding; and navigating through the state information technology procurement process. Once a new system is in place, mandatory reporting to the system will be pursued.

The existing registry is currently being used for public health department assessment activities. Annually, the registry is used to assess the status of 2-year olds in each county that have received any public health department services.

Pilot Projects

Through collaboration with the North Carolina Healthcare Information and Communications Alliance, Inc. (NCHICA) the Immunization Branch is actively participating in a unique demonstration project that will give providers secure Internet access to view immunization records. **Provider Access to Immunization Registry Securely**, or **PAIRS** was introduced to selected participants in February 2000, and will link immunization records from both public and private sources in a database accessible through secure Internet connections. In an era of fragmented health care, PAIRS will give providers timely and efficient access to more complete immunization records for their patients, thereby helping to ensure that more children are immunized accurately and on time. A long-term goal of the project is to help facilitate the enhancement and full implementation of the North Carolina Immunization Registry (NCIR) in private immunization providers' offices statewide. This project will help to prepare providers, as it offers the opportunity to uncover and eliminate potential barriers and to clarify how an immunization registry can be successfully integrated within immunization service delivery.

In addition, in partnership with the University of North Carolina at Chapel Hill, Program on Health Outcomes, we plan to use registry data to look at the effects of vaccine schedule changes on vaccine delivery. Plans are to also look at issues such as over-immunization, simultaneous administration, and variance of actual vaccine delivery from the recommended schedule.